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MIGRATION OF INDUSTRY

Introduction

Manufacturing industries in the United States have been on the move for decades--migrating out of northern and midwestern states where industrialization took root more than a century ago and into southern and western states which are relative newcomers to the industrial scene. This report documents that regional shift in manufacturing employment, discusses reasons for the shift, and projects regional shares of manufacturing employment for 1985 and 1990.

The projections cover twenty industries and six regions of the country. The regions are: New England, Middle Atlantic, and East North Central (the Snowbelt, for purposes of this report), and South East, South West Central, and Western (the Sunbelt). States included in each region are listed at the end of the Introduction.

The report is divided into two sections: Why and How Sunbelt Employment Grew; and How the Sunbelt Will Continue to Grow. Following the text are tables showing regional employment data by industry for past selected years, with projections for 1985 and 1990. The tables are:

I. Regional Shares of U.S. Manufacturing Employment

II. Industrial Shares of Regional Manufacturing Employment

III. Regional Employment Levels by Industry

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The regions cited in this report are defined as follows:

New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Middle Atlantic: New Jersey, New York, Pennsylvania

East North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin

South East: Alabama, Delaware, District of Columbia, Florida, Georgia, Kentucky, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia

North West Central: North Dakota, South Dakota, Nebraska, Minnesota, Iowa

South West Central: Kansas, Missouri, Oklahoma, Arkansas, Texas, Louisiana

Western: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, Alaska, Hawaii

MIGRATION OF INDUSTRY

Why and How Sunbelt Employment Grew

For the past quarter of a century, employment in manufacturing industries has grown slowly. Average growth per year from 1955 to 1978 was just 0.8%, compared to employment growth in all nonagricultural industries of 2.4% a year.

But to focus on manufacturing employment growth in the U.S. as a whole is to ignore the sharp shifts that occurred in regional employment patterns over the past few decades. As Chart I below shows, Sunbelt states enjoyed rapid growth in manufacturing employment from 1955 to 1978--2.3%

Chart I. Manufacturing Employment & Growth, 1955-78

	Manufacturing Employment (Thousands) 1955	1978	Average Annual % Change, 1955-78
Total U.S.			
All Manufacturing	16,882	20,476	0.8%
Durable Goods	9,285	12,081	1.2
Nondurable Goods	7,597	8,395	0.4
Snowbelt			
All Manufacturing	10,804	10,238	-0.2
Durable Goods	6,314	6,765	0.3
Nondurable Goods	4,490	3,473	-1.1
Sunbelt			
All Manufacturing	6,078	10,238	2.3
Durable Goods	2,971	5,316	2.6
Nondurable Goods	3,107	4,922	2.0

SOURCE: U.S. Bureau of Labor Statistics

a year. During the same period, the Snowbelt suffered not only a relative but also an absolute loss of factory jobs--nearly 600,000. This divergence of regional economic fortunes since the 1950s boosted the Sunbelt's share of manufacturing employment from one-third in 1955 to one-half in 1978. Moreover, by 1978 the Sunbelt's share of nondurable goods workers (59%) far exceeded that of the Snowbelt (41%). By contrast, the Snowbelt still provides homes to more durable goods producers (56%) than do the South Eastern, West Central, and Western states (44%).

Why manufacturers decided to move to the Sunbelt in increasing numbers over the past several decades is due to a host of reasons. One key factor was the discrepancy in wages between the regions. With roots deeply planted in agriculture, a traditionally low-paid sector, the Sunbelt offered a labor pool whose wage expectations were significantly below that of workers in the highly industrialized Snowbelt states. Consequently, labor-intensive, lower-paying industries not requiring skilled workers initiated the move southward many years ago. For example, by 1955 the South Eastern states alone employed nearly two-thirds of all the nation's textile workers, and the Sunbelt in 1955 had more than one-half of all food workers. The gap in wages by and large still persists (see Chart II).

Another important lure possessed by the Sunbelt was energy--the closer companies could get to energy supplies, the cheaper those supplies were, as also shown in Chart II. Certain industries--chemicals, and petroleum and coal--put heavy concentrations of workers in the Sunbelt long ago because of the region's energy resources. But more recently, since OPEC engineered the energy price boom, other industriess too have sought locations closer to energy sources.

Chart II. The Regional Gap in Manufacturing Wages and Energy Costs, 1976

Region	Average Hourly Wage	Cents per BTU Consumed
New England	$4.70	153
Middle Atlantic	5.83	135
East North Central	6.10	120
Southeast	4.41	114
West Central	5.19	90
West	5.53	112

SOURCES: U.S. Bureau of Labor Statistics; New England Economic Review

Besides preferring the wage structure and the energy availability of the Sunbelt, firms also decided to go West and South because unions were weaker than in the Snowbelt, tax incentives were stronger, land was more available, and the lifestyle was attractive.

Given these reasons for leaving the Snowbelt and seeking a place in the Sunbelt, almost every industry since 1955 has shifted employment to the South and West. And no industry has made a major move the other way.

A region's share of national employment can grow for either or both of two reasons: (1) The region could be the major base of industries whose rates of employment growth are greater than the national average; and (2), industries outside the region could increase their shares of employment inside the region. Since the Sunbelt's manufacturing employment was primarily in nondurables in 1955, and since nondurables grew more slowly than durables since 1955, the Sunbelt's employment shares did not increase in the past quarter century by and large as a result of rapid growth of industries already located there. Reason (1) above, that

is, does not apply. Rather, the Sunbelt's employment share shot up mainly due to reason (2)--more specifically, because producers migrated from Snow to Sunbelt. The regional employment shares of six durable goods industries in particular shifted sharply in favor of the Sunbelt, by more than ten percentage points each from 1955 to 1975 (Chart III). These six industries, in other words, have been the driving force behind the

Chart III. Durables Shift to Sunbelt, 1955-75

Industry	Sunbelt Employment Share 1955	Sunbelt Employment Share 1975	Percentage Point Change, 1955-75
Electrical Equipment	18%	43%	25
Furniture & Fixtures	43	62	19
Instruments	11	30	19
Machinery	19	37	18
Fabricated Metal	23	39	16
Stone, Clay & Glass	40	51	11

SOURCE: U.S. Bureau of Labor Statistics

Sunbelt's gains in manufacturing employment shares.

This is not to say, however, that relatively fast-growing nondurable goods industries did not contribute to the Sunbelt's employment growth.

Take chemicals, for example: Employment in this industry grew at the relatively rapid pace of 1.5% a year from 1955 to 1978--nearly four times the rate of nondurables in general. Meanwhile, chemical companies increased their share of employment in the Sunbelt from 45% in 1955 to 50% by 1975.

The rubber and plastics industry, too, shifted employment from Snow to Sunbelt while experiencing extremely rapid 3.2% annual growth in number of workers. Thus, by growing rapidly and by putting an increasingly large share of workers in the Sunbelt, the rubber and plastics industry also contributed to the overall migration of industry to the South and West.

However, nondurables industries whose home for some time has been the Sunbelt--tobacco, textiles, food, petroleum--all showed a fall in employment from 1955 to 1978. And growth in the Sunbelt-based apparel industry grew by just 0.3% during the period. These industries, therefore, did not help the Sunbelt gain a larger share of total manufacturing employment. To repeat, it was the shift in shares of durable goods employment from Snow to Sunbelt that largely accounted for the Sunbelt's success in gaining increasing proportions of America's manufacturing workers.

How the Sunbelt Will Continue to Grow

While manufacturing employment grew by only 0.8% annually from 1955 to 1978, yearly growth from 1978 to 1985 is expected nearly to double to 1.7%, as indicated in Chart IV. This pickup in employment growth will be due to two factors: One, the remaining baby boomers (people born from 1946 to 1960) will be entering the job market, putting downward pressure on wages and thus reducing the relative price of labor versus capital; and two, high and rising energy costs will induce firms to reduce the capital/energy-intensiveness of their production methods and thus to hire relatively more labor than they would if energy prices were not so high.

Once the baby boom generation is absorbed into the labor force, manufacturing employment growth is expected to slow considerably--to 0.7% a year in 1985-90--as the baby "bust" generation enters the marketplace. With firms bidding for relatively fewer workers after 1985, wages

Chart IV. Manufacturing Employment & Growth, 1978 to 1990

	Manufacturing Employment (Thousands)			Average Annual % Change	
	1978	1985	1990	1978-85	1985-90
Total U.S.					
All Manufacturing	20,476	23,014	23,882	1.7%	0.7%
Durable Goods	12,081	14,081	14,692	2.2	0.9
Nondurable Goods	8,395	8,933	9,189	0.9	0.6
Snowbelt					
All Manufacturing	10,238	10,636	10,468	0.5	-0.3
Durable Goods	6,765	7,029	6,920	0.5	-0.3
Nondurable Goods	3,473	3,606	3,548	0.5	-0.3
Sunbelt					
All Manufacturing	10,238	12,377	13,413	2.7	1.6
Durable Goods	5,316	7,049	7,772	4.1	2.0
Nondurable Goods	4,922	5,328	5,641	1.1	1.1

SOURCES: U.S. Bureau of Labor Statistics; McGraw-Hill Publications Co. Department of Economics

will start to rise more rapidly than in 1978-85 and incentives will grow for managers to increase the amount of capital used in production relative to the number of workers. Moreover, it is assumed that development of energy-saving capital goods will have progressed far enough so that firms will not have to shy away from capital-intensive production processes because of sky-high energy costs.

In the two future time periods covered by this report--from now until 1985, and from 1985 to 1990--the Sunbelt is expected to garner greater proportions of manufacturing employment, as shown in Chart V. By 1990 the share is projected to be 56%, up from 50% in 1978.

Chart V. Regional Manufacturing Employment Shares

	-Percent of Manufacturing Employment In Region-					
	1955	1965	1975	1978	1985	1990
Snowbelt	64%	58%	52%	50%	46%	44%
Sunbelt	36	42	48	50	54	56

SOURCES: U.S. Bureau of Labor Statistics; McGraw-Hill Publications Co. Department of Economics

Besides showing this further increase in Sunbelt employment shares, the projections point to several important developments. First, due to the rapid growth of overall manufacturing employment up to 1985, both the Sun and Snowbelts are expected to enjoy increases in absolute employment levels, even though the Sunbelt wins a growing share of employment. But as overall employment slows from 1985 to 1990, the Snowbelt is projected to suffer an absolute as well as a relative loss in manufacturing jobs. Growth in the level of employment, meanwhile, is

expected to keep growing in the Sunbelt. Thus, though regional economic strains may be calmed during the next five years as employment rises in both Belts, tensions could well increase after 1985 as Snowbelt states are forced to make adjustments: Falling levels of manufacturing employment would, for example, lead either to lower tax revenues and cuts in government services, or maintenance of government services but at higher tax rates. Such pressure would likely lead to increased Snowbelt efforts to woo industry back.

Another key element in the projections is that all industries are expected to shift employment from Snow to Sunbelt through 1990. Moreover, as in the period since 1955, industries expected to create jobs at the fastest pace are in the durables sector. Thus, while heavily Sunbelt-based nondurables industries will contribute to relative Sunbelt employment gains, the big boost will again come from the durables.

Chart VI illustrates this point. The chart shows that from 1975 to 1990, total manufacturing employment is expected to grow by 1.8% a year. Note, however, that most of the fast-growing industries are expected to be in the durables sector, and that most of these durable goods industries are expected to increase their Sunbelt share of employment by more than the total manufacturing average of eight percentage points. Also note that quite a few industries projected to have slow employment growth are already heavily concentrated in the Sunbelt--apparel, food, lumber and wood products, petroleum and coal, and tobacco. And except for apparel, all of these industries are expected to shift a less than average proportion of employment away from the Snow to the Sunbelt. In other words, these industries are expected to contribute relatively little to the Sunbelt's continuing employment share gains through 1990.

Chart VI. Projected Employment Growth Rates & Sunbelt Shares

Industry	Employment Growth, 1975-90 Annual Average % Change	Sunbelt Employment Share 1975	Sunbelt Employment Share 1990	Percentage Point Change in Sunbelt Share, 1975-90
Electrical Equipment	2.9%	43%	59%	+16
Furniture & Fixtures	2.7	61	70	+ 9
Instruments	2.6	29	44	+15
Fabricated Metal	2.4	39	49	+10
Transportation Equipment	2.4	45	49	+ 4
Rubber & Plastics	2.4	32	46	+14
Textile Mill Products	2.3	76	80	+ 4
Chemical & Allied Products	2.1	51	55	+ 4
Machinery	1.9	37	50	+13
TOTAL MANUFACTURING	1.8	48	56	+ 8
Apparel	1.8	59	70	+11
Miscellaneous Durables	1.7	43	51	+ 8
Lumber & Wood Products	1.6	78	80	+ 2
Paper & Allied Products	1.5	47	51	+ 4
Printing & Publishing	1.4	45	56	+ 9
Stone, Clay, Glass	1.2	50	58	+ 8
Primary Metal	1.2	32	41	+ 9
Food & Kindred Products	0.4	60	66	+ 6
Petroleum & Coal	-0.6	60	63	+ 3
Leather & Products	-1.0	39	49	+10
Tobacco	-1.3	89	95	+ 6

SOURCE: McGraw-Hill Publications Co. Department of Economics

The third point contained in the projections is that while the Sunbelt is expected to attract more industry than the Snowbelt over the next decade, the industrial lure of the Sunbelt is expected to diminish somewhat as time goes on. Thus, the Sunbelt's share of manufacturing employment is projected to climb from 48% in 1975 to 54% in 1985--an advance of 0.6 percentage points per year on average. But from 1985 to 1990, employment share growth in the Sunbelt is projected to slow to 0.4 points a year, raising the total Sunbelt share to 56% in 1990.

The reason for the expected slowdown is that as the South and West become increasingly industrialized and urban, the disadvantages companies perceive in the Snowbelt will become more and more visible in the Sunbelt. Commuter transportation problems, for example, will likely intensify in the Sunbelt; and as traffic jams worsen, corporate executives' opinions of the superior Sunbelt quality of life could be lowered.

At the same time, greater concentration of industry in the South and West would probably lead to higher wages as firms bid against one another for labor. Wages in the Sun and Snowbelts, that is, would converge, eliminating one industrial attraction the Sunbelt has always had. The cost of Sunbelt land would also become less competitive as industry continues to seek space ouside the Snowbelt. And with their manufacturing bases shrinking, Snowbelt states will try to turn this changing competitive situation to their advantage in attracting industry.

On the other hand, continued growth in the Sunbelt means increased labor pool skills. And this development should improve the Sunbelt's ability to attract (mainly durable goods) industries requiring skilled labor, and to reduce its dependence on lower-skill (mainly nondurable

goods) industries. Thus, the projected pattern of employment growth shows that by 1985 the Sunbelt will have one-half of the nation's durable goods workers, with the share rising to 53% by 1990. The Sunbelt's nondurables share, meanwhile, is expected to grow at a slower pace, from 60% in 1985 to 61% in 1990.

Summary

Manufacturing industries for the past quarter of a century have been migrating from the Snow to the Sunbelt at an extraordinary pace: In 1955, just over a third of manufacturing workers lived in the South and West; by 1978, a half made their homes in Sunbelt states.

Moreover, Sunbelt gains came not because of growth in the labor-intensive industries that had moved out of the Snowbelt long ago; they came, rather, because the Sunbelt was able to attract new industries. And, as opposed to the nondurable goods industries that had earlier moved to Sunbelt states, these new industries--like electrical equipment, furniture, instruments, and machinery--were in the durable goods sector. The Sunbelt, that is, diversified its manufacturing base, providing an increasing number of jobs for skilled workers.

During the next decade, the Sunbelt should continue to grow and diversify. From 1978 to 1990, manufacturing employment in the region is projected to climb by 2.3% a year, hiking the Sunbelt share of employment to 56% in 1990. As in the past twenty-five years, the big impetus to growth is expected to come from the durable goods industries: The Sunbelt share of durables' employment is projected to surge from 44% in 1978 to 53% in 1990; the nondurables' share is expected to rise just slightly from 59% in 1978 to 61% in 1990.

Meanwhile, the level of manufacturing employment in the Snowbelt should grow very slowly--by about 0.2% a year on average. However, after the last of the baby boom enters the labor force (by 1985), the number of people employed in manufacturing in the North and East is expected to

decline. Faced with a shrinking tax base, Snowbelt states may mount a strong offensive to try to lure industry back and reverse the decades-long trend of migration to the Sunbelt.

Partly because Snowbelt states could take action, but also because labor, land, and other costs are expected to rise relatively faster in the Sunbelt, manufacturing's move to that region is expected to slow down from 1985 to 1990. Nonetheless, migration to the Sunbelt is expected to continue, with durable goods industries again in the lead.

TABLE I

REGIONAL SHARES OF U.S. MANUFACTURING EMPLOYMENT, 1975
PROJECTIONS FOR 1985 AND 1990
(Percent)

		New England	Middle Atlantic	East North Central	South East	South West Central	Western
TOTAL MANUFACTURING	1955	9%	26%	29%	16%	10%	10%
	1965	8	23	27	19	11	12
	1975	7	19	26	21	14	13
	1985	6	16	24	23	15	16
	1990	6	15	23	24	15	17
DURABLE GOODS	1955	8	23	37	11	9	12
	1965	8	21	34	13	10	13
	1975	7	18	32	15	13	15
	1985	7	14	29	17	15	18
	1990	6	13	28	19	16	19
Lumber & Wood Products	1955	6	6	10	34	14	30
	1965	6	6	10	32	13	33
	1975	5	6	11	29	16	34
	1985	4	5	12	29	15	34
	1990	4	4	12	30	15	35
Furniture & Fixtures	1955	4	20	33	26	8	9
	1965	4	17	25	36	9	9
	1975	4	13	22	40	10	12
	1985	3	10	18	43	10	16
	1990	3	10	17	44	11	16
Stone, Clay & Glass	1955	3	30	27	16	14	10
	1965	3	26	24	21	15	12
	1975	3	22	25	22	16	13
	1985	3	19	23	24	18	14
	1990	3	17	22	24	19	15

Source: McGraw-Hill Department of Economics

TABLE I (Continued)

REGIONAL SHARES OF U.S. MANUFACTURING EMPLOYMENT, 1975
PROJECTIONS FOR 1985 AND 1990
(Percent)

		New England	Middle Atlantic	East North Central	South East	South West Central	Western
DURABLE GOODS - Cont'd							
Primary Metals	1955	5%	31%	40%	12%	5%	7%
	1965	4	29	40	13	6	8
	1975	4	25	39	15	8	9
	1985	4	19	39	17	10	10
	1990	3	17	39	19	11	10
Fabricated Metal	1955	10	25	42	7	8	8
	1965	9	21	41	9	10	10
	1975	9	17	35	13	15	11
	1985	8	13	32	16	17	13
	1990	8	12	31	17	18	14
Machinery	1955	11	22	46	6	7	6
	1965	9	20	42	8	12	8
	1975	8	18	37	10	16	11
	1985	7	14	31	13	20	14
	1990	7	13	30	14	21	15
Electrical Equipment & Supplies	1955	11	31	40	6	5	7
	1965	10	27	33	10	8	13
	1975	9	21	27	14	13	16
	1985	9	15	22	18	15	21
	1990	8	13	20	20	16	23
Transportation Equipment	1955	5	14	43	8	11	19
	1965	7	12	41	10	12	18
	1975	6	10	39	12	14	20
	1985	5	9	38	13	14	21
	1990	5	8	38	13	14	21
Instruments & Related Products	1955	16	55	19	3	1	7
	1965	15	54	18	4	2	9
	1975	14	38	19	7	8	15
	1985	13	29	19	10	8	20
	1990	12	26	18	13	10	22
Durable Goods nec	1955	6	14	34	14	21	11
	1965	5	13	28	20	22	13
	1975	9	17	31	15	13	15
	1985	8	14	30	16	15	18
	1990	6	13	30	19	15	17

Source: McGraw-Hill Department of Economics

TABLE I (Continued)

REGIONAL SHARES OF U.S. MANUFACTURING EMPLOYMENT, 1975
PROJECTIONS FOR 1985 AND 1990
(Percent)

		New England	Middle Atlantic	East North Central	South East	South West Central	Western
NONDURABLE GOODS	1955	10%	28%	19%	22%	12%	8%
	1965	9	26	18	26	13	9
	1985	7	21	18	30	14	11
	1985	6	19	16	32	15	13
	1990	5	17	16	33	15	14
Food & Kindred Products	1955	5	19	24	17	21	14
	1965	5	18	21	19	21	16
	1975	4	15	21	21	22	19
	1985	4	13	19	22	22	21
	1990	4	12	18	23	22	22
Tobacco	1955	--	25	--	75	--	--
	1965	--	19	--	81	--	--
	1975	--	11	--	89	--	--
	1985	--	7	--	93	--	--
	1990	--	5	--	95	--	--
Textile Mill Products	1955	16	20	3	58	2	1
	1965	11	17	3	66	2	1
	1975	7	14	3	73	2	2
	1985	7	11	3	75	1	3
	1990	7	10	3	75	1	4
Apparel & Related Products	1955	8	50	10	20	8	5
	1965	6	41	8	30	9	6
	1975	5	30	6	37	12	10
	1985	4	24	5	42	12	13
	1990	4	22	4	44	13	14
Paper & Allied Products	1955	14	24	28	16	10	8
	1965	12	22	26	18	12	9
	1975	10	19	24	22	15	10
	1985	9	18	23	24	16	11
	1990	9	17	23	24	16	11
Printing & Publishing	1955	7	31	28	11	14	9
	1965	7	29	26	13	14	12
	1975	7	24	24	16	16	13
	1985	7	22	18	18	18	18
	1990	6	21	17	19	18	19

Source: McGraw-Hill Department of Economics

TABLE I (Continued)

REGIONAL SHARES OF U.S. MANUFACTURING EMPLOYMENT, 1975
PROJECTIONS FOR 1985 AND 1990
(Percent)

		New England	Middle Atlantic	East North Central	South East	South West Central	Western
NONDURABLE GOODS - Cont'd							
Chemicals & Allied Products	1955	4%	28%	23%	27%	12%	6%
	1965	4	27	21	29	14	7
	1975	4	25	20	29	14	7
	1985	3	23	20	29	17	8
	1990	3	22	20	30	18	8
Petroleum & Coal	1955	--	26	19	1	37	17
	1965	--	24	18	2	36	20
	1975	--	20	20	4	40	17
	1985	--	19	19	5	39	18
	1990	--	18	19	6	39	18
Rubber & Plastics	1955	18	21	45	8	--	8
	1965	16	22	42	11	2	8
	1975	11	19	38	17	5	10
	1985	8	17	34	23	6	13
	1990	6	16	32	26	6	14
Leather & Products	1955	31	32	15	8	13	2
	1965	30	30	13	12	13	2
	1975	23	26	12	17	17	4
	1985	21	22	10	20	19	8
	1990	20	21	10	21	20	9

Source: McGraw-Hill Department of Economics

TABLE II

INDUSTRIAL SHARES OF REGIONAL MANUFACTURING EMPLOYMENT, 1975
PROJECTIONS FOR 1985 AND 1990
(Percent)

	Total U.S.					New England				
	1955	1965	1975	1985	1990	1955	1965	1975	1985	1990
TOTAL MANUFACTURING	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DURABLE GOODS	55	57	58	61	62	48	53	61	65	66
Lumber & Wood Products	4	3	3	3	3	3	2	2	2	2
Furniture & Fixtures	2	2	2	3	3	1	1	1	1	1
Stone, Clay & Glass	3	3	3	3	3	1	1	1	1	1
Primary Metal	8	7	6	6	6	4	4	4	3	3
Fabricated Metal	7	7	8	9	9	7	8	10	11	11
Machinery	9	10	11	11	11	11	12	13	13	14
Electrical Equipment & Supplies	7	9	9	10	11	9	11	12	15	15
Transportation Equipment	10	10	9	10	10	6	8	9	8	8
Instruments & Related Products	2	2	3	3	3	3	3	6	7	7
Miscellaneous Durable Goods	3	3	2	2	2	2	2	3	3	2
NONDURABLE GOODS	45	43	42	39	38	52	47	39	35	34
Food & Kindred Products	11	10	9	8	7	6	5	5	5	5
Tobacco	1	1	---	---	---	---	---	---	---	---
Textile Mills Products	6	5	5	4	4	11	7	5	4	5
Apparel & Related Products	7	7	7	7	7	6	6	5	4	4
Paper & Allied Products	3	4	4	3	3	5	5	5	5	5
Printing & Publishing	5	5	6	6	6	4	5	6	6	6
Chemical & Allied Products	5	5	6	6	6	2	2	3	3	3
Petroleum & Coal	2	1	1	1	1	---	---	---	---	---
Rubber & Plastics	2	2	3	3	4	4	4	5	4	4
Leather & Products	2	2	1	1	1	8	7	5	4	3
Miscellaneous Nondurable Goods	2	2	---	---	---	6	6	---	---	---

Source: McGraw-Hill Department of Economics

TABLE II (Continued)

INDUSTRIAL SHARES OF REGIONAL MANUFACTURING EMPLOYMENT, 1975
PROJECTIONS FOR 1985 AND 1990
(Percent)

	Middle Atlantic					East North Central				
	1955	1965	1975	1985	1990	1955	1965	1975	1985	1990
TOTAL MANUFACTURING	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DURABLE GOODS	50	51	55	55	54	71	72	71	74	74
Lumber & Wood Products	1	1	1	1	1	2	1	2	2	2
Furniture & Fixtures	2	2	2	2	2	2	2	2	2	2
Stone, Clay & Glass	3	3	4	4	4	3	3	3	3	3
Primary Metal	10	10	8	7	7	11	11	9	10	9
Fabricated Metal	7	6	7	7	7	10	10	11	12	12
Machinery	8	9	10	10	10	14	15	16	14	15
Electrical Equipment & Supplies	9	10	10	10	10	10	11	10	10	10
Transportation Equipment	6	5	5	6	6	15	14	14	16	17
Instruments & Related Products	4	4	6	6	6	1	1	2	3	3
Miscellaneous Durable Goods	1	2	2	2	2	3	3	3	3	3
NONDURABLE GOODS	50	49	45	45	46	29	28	29	26	26
Food & Kindred Products	8	8	7	6	6	9	8	7	6	6
Tobacco	1	---	---	---	---	---	---	---	---	---
Textile Mills Products	5	4	3	3	3	1	1	1	1	1
Apparel & Related Products	14	13	11	10	10	2	2	2	1	1
Paper & Allied Products	3	3	3	4	4	3	3	3	3	3
Printing & Publishing	6	7	7	8	8	4	5	5	4	4
Chemical & Allied Products	5	6	7	8	9	4	4	4	5	5
Petroleum & Coal	1	1	1	1	1	1	1	1	1	1
Rubber & Plastics	2	2	4	4	4	3	3	5	5	5
Leather & Products	3	2	2	1	1	1	1	1	---	---
Miscellaneous Nondurable Goods	2	2	---	---	---	1	1	---	---	---

Source: McGraw-Hill Department of Economics

TABLE II (Continued)

INDUSTRIAL SHARES OF REGIONAL MANUFACTURING EMPLOYMENT, 1975
PROJECTIONS FOR 1985 AND 1990
(Percent)

	Southeast					South West Central				
	1955	1965	1975	1985	1990	1955	1965	1975	1985	1990
TOTAL MANUFACTURING	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DURABLE GOODS	38	40	41	46	47	48	52	57	62	63
Lumber & Wood Products	9	6	5	4	4	6	4	4	3	3
Furniture & Fixtures	3	4	4	5	5	2	2	2	2	2
Stone, Clay & Glass	3	4	4	3	3	4	4	4	4	4
Primary Metal	6	5	4	5	4	4	4	3	4	4
Fabricated Metal	3	3	5	6	6	5	6	9	10	10
Machinery	3	4	5	6	7	8	10	14	15	15
Electrical Equipment & Supples	3	5	6	8	9	3	6	9	11	11
Transportation Equipment	5	5	5	6	6	10	10	10	10	9
Instruments & Related Products	---	---	1	2	2	---	---	2	2	2
Miscellaneous Durable Goods	2	3	2	2	2	5	5	2	2	2
NONDURABLE GOODS	62	60	59	54	53	52	48	43	38	37
Food & Kindred Products	11	10	9	7	7	22	18	14	11	10
Tobacco	3	2	2	1	1	---	---	---	---	---
Textile Mill Products	23	18	16	13	12	1	1	1	---	---
Apparel & Related Products	9	12	12	12	12	6	6	6	6	5
Paper & Allied Products	3	3	4	3	3	3	4	4	3	3
Printing & Publishing	3	4	4	5	4	6	7	7	7	6
Chemical & Allied Products	8	8	8	7	7	5	6	6	6	7
Petroleum & Coal	---	---	---	---	---	4	3	3	2	2
Rubber & Plastics	1	1	3	4	4	---	---	1	1	1
Leather & Products	1	1	1	1	1	3	2	2	1	1
Miscellaneous Nondurable Goods	1	1	---	---	---	3	2	---	---	---

Source: McGraw-Hill Publications Company

TABLE II (Continued)

INDUSTRIAL SHARES OF REGIONAL MANUFACTURING EMPLOYMENT, 1975
PROJECTIONS FOR 1985 AND 1990
(Percent)

	Western				
	1955	1965	1975	1985	1990
TOTAL MANUFACTURING	100%	100%	100%	100%	100%
DURABLE GOODS	65	66	66	68	68
Lumber & Wood Products	13	10	9	7	7
Furniture & Fixtures	2	2	2	2	3
Stone, Clay & Glass	3	3	3	3	3
Primary Metal	5	5	4	4	4
Fabricated Metal	6	6	7	7	7
Machinery	6	7	10	10	10
Electrical Equipment & Supplies	5	10	11	14	15
Transportation Equipment	20	15	14	14	13
Instruments & Related Products	1	1	3	4	5
Miscellaneous Durable Goods	3	3	3	3	2
NONDURABLE GOODS	35	34	34	32	32
Food & Kindred Products	15	14	13	10	10
Tobacco	--	1	--	--	--
Textile Mill Products	4	4	1	1	1
Apparel & Related Products	3	3	5	6	6
Paper & Allied Products	4	5	3	2	2
Printing & Publishing	3	3	6	6	6
Chemical & Allied Products	2	2	3	3	3
Petroleum & Coal	1	1	1	1	1
Rubber & Plastics	--	--	3	3	3
Leather & Products	2	1	--	1	--
Miscellaneous Nondurable Goods	--	--	--	--	--

Source: McGraw-Hill Department of Economics

TABLE III

REGIONAL EMPLOYMENT LEVELS BY INDUSTRY, 1975
PROJECTIONS FOR 1985 AND 1990
(Thousands)

	Total U.S.			New England		
	1975	1985	1990	1975	1985	1990
TOTAL MANUFACTURING	18,328	23,014	23,882	1,267	1,449	1,386
DURABLE GOODS	10,689	14,081	14,692	770	941	885
Lumber & Wood Products	615	762	782	28	33	29
Furniture & Fixtures	417	581	623	15	17	17
Stone, Clay & Glass	629	749	747	18	21	19
Primary Metal	1,139	1,377	1,353	46	50	44
Fabricated Metal	1,459	1,977	2,075	127	159	150
Machinery	2,057	2,557	2,717	163	189	185
Electrical Equipment & Supplies	1,702	2,421	2,598	155	210	206
Transportation Equipment	1,715	2,358	2,463	108	120	113
Instruments & Related Products	550	771	813	76	101	94
Miscellaneous Durable Goods	407	525	521	35	42	28
NONDURABLE GOODS	7,634	8,933	9,189	497	508	501
Food & Kindred Products	1,657	1,796	1,772	65	72	70
Tobacco	75	68	62	---	---	---
Textile Mills Products	668	928	943	60	65	69
Apparel & Related Products	1,243	1,557	1,621	65	62	62
Paper & Allied Products	642	764	805	67	72	76
Printing & Publishing	1,088	1,326	1,334	78	87	89
Chemical & Allied Products	1,015	1,255	1,389	39	37	38
Petroleum & Coal	194	181	177	---	---	---
Rubber & Plastics	608	816	874	65	62	52
Leather & Products	248	241	213	58	51	44

SOURCES: McGraw-Hill Department of Economics; U.S. Bureau of Labor Statistics

TABLE III (Continued)

REGIONAL EMPLOYMENT LEVELS BY INDUSTRY, 1975
PROJECTIONS FOR 1985 AND 1990
(Thousands)

	----Middle Atlantic----			--East North Central--		
	1975	1985	1990	1975	1985	1990
TOTAL MANUFACTURING	3,544	3,642	3,475	4,730	5,545	5,607
DURABLE GOODS	1,935	1,995	1,879	3,378	4,093	4,156
Lumber & Wood Products	36	39	34	69	94	97
Furniture & Fixtures	53	58	60	90	106	104
Stone, Clay & Glass	138	142	129	155	170	165
Primary Metal	288	267	234	446	540	528
Fabricated Metal	249	257	245	511	640	657
Machinery	368	358	345	751	800	822
Electrical Equipment & Supplies	363	370	343	460	543	535
Transportation Equipment	163	209	208	660	904	946
Instrument & Related Products	208	223	209	103	143	145
Miscellaneous Durable Goods	71	72	70	128	154	158
NONDURABLE GOODS	1,609	1,647	1,596	1,352	1,451	1,451
Food & Kindred Products	249	230	208	341	342	326
Tobacco	8	5	3	---	---	---
Textile Mill Products	121	99	92	24	30	32
Apparel & Related Proudcts	377	377	353	76	73	65
Paper & Allied Products	121	136	138	152	177	185
Printing & Publishing	262	292	282	257	242	227
Chemical & Allied Products	253	285	304	205	251	278
Petroleum & Coal	39	34	31	38	35	34
Rubber & Plastics	115	136	140	229	277	285
Leather & Products	64	54	44	30	24	20

SOURCES: McGraw-Hill Department of Economics; U.S. Bureau of Labor Statistics

TABLE III (Continued)

REGIONAL EMPLOYMENT LEVELS BY INDUSTRY, 1975
PROJECTIONS FOR 1985 AND 1990
(Thousands)

	Southeast			South West Central		
	1975	1985	1990	1975	1985	1990
TOTAL MANUFACTURING	3,844	5,275	5,715	2,504	3,455	3,692
DURABLE GOODS	1,582	2,440	2,720	1,422	2,135	2,309
Lumber & Wood Products	178	224	232	96	115	117
Furniture & Fixtures	168	251	275	41	59	65
Stone, Clay & Glass	140	176	178	97	132	141
Primary Metal	169	240	256	88	143	152
Fabricated Metal	190	320	362	222	336	358
Machinery	204	332	378	337	511	568
Electrical Equipment & Supplies	235	431	510	213	363	407
Transportation Equipment	204	302	326	237	330	345
Instrument & Related Products	39	80	102	42	67	78
Miscellaneous Durable Goods	62	84	101	55	77	78
NONDURABLE GOODS	2,262	2,835	2,995	1,082	1,320	1,383
Food & Kindred Products	340	395	404	361	389	386
Tobacco	67	63	58	---	---	---
Textile Mill Products	631	695	703	14	11	10
Apparel & Related Products	457	647	705	148	191	203
Paper & Allied Products	143	179	193	93	119	131
Printing & Publishing	171	239	248	170	232	242
Chemical & Allied Products	297	368	406	144	213	249
Petroleum & Coal	8	9	10	77	71	69
Rubber & Plastics	105	191	224	32	47	52
Leather & Products	43	48	43	43	47	41

SOURCES: McGraw-Hill Department of Economics; U.S. Bureau of Labor Statistics

TABLE III (Continued)

REGIONAL EMPLOYMENT LEVELS BY INDUSTRY, 1975
PROJECTIONS FOR 1985 AND 1990
(Thousands)

	Western		
	1975	1985	1990
TOTAL MANUFACTURING	2,439	3,647	4,006
DURABLE GOODS	1,603	2,474	2,743
Lumber & Wood Products	207	261	272
Furniture & Fixtures	50	90	102
Stone, Clay & Glass	79	107	114
Primary Metal	106	138	142
Fabricated Metal	160	265	302
Machinery	234	366	417
Electrical Equipment & Supplies	279	503	596
Transportation Equipment	343	493	530
Instrument & Related Products	83	158	183
Miscellaneous Durable Goods	61	92	87
NONDURABLE GOODS	836	1,173	1,263
Food & Kindred Products	307	370	377
Tobacco	---	---	---
Textile Mills Products	18	27	33
Apparel & Related Products	122	205	228
Paper & Allied Products	65	81	87
Printing & Publishing	145	235	250
Chemical & Allied Products	74	102	115
Petroleum & Coal	33	32	31
Rubber & Plastics	62	103	124
Leather & Products	10	18	19

SOURCES: McGraw-Hill Department of Economics; U.S. Bureau of Labor Statistics